GOLDMUND T3F

AUTOMATIC RADIAL TONE ARM

USER MANUAL

WARNING !

This high quality tone-arm with unique technical features is invaluable for accurate tracking of monophonic and stereophonic records.

Only careful use can provide all the satisfaction you expect.

All handling must be done according to the following instructions, since it is while setting up that you risk damaging the arm.

However, if the instructions are scrupulously carried out, you will notice that new automatic functions make handling simple and convenient.

IMPORTANT: PLEASE DO NOT CONNECT ANY WIRE OR MOVE ANY

PART BEFORE READING THE FOLLOWING INSTRUCTIONS

I. PRELIMINARIES

The package contains:

- The tone arm itself.

- A box of accessories containing:

. three BTR keys

. four screws for mounting the tone arm on the turntable

. spare screws for headshell

. damping fluid

. a syringe to fill the damping well with damping fluid.

Unpack the arm without touching the tubular parts. Handle it by its side only.

CAUTION: There are fragile wires at the back of the unit.

CAUTION: Do not remove the arm-tube clamping brackets (with two nylon screws).

The arm is ready for installation on your turntable. To ensure precision and safety, it is

necessary to mount the cartridge on the tone arm first.

II. MOUNTING OF THE CARTRIDGE

The headshell is a small rectangular white plate made of ceramic held in place by four small screws in the end of the arm-tube. Loosen the screws with one of the Allen keys supplied.

To mount the cartridge, select the two holes nearest to the arm pivot so as to achieve the widest contact surface. However, if the cartridge is too large (or for any other geometrical reason), you may select the two front holes. The optimum solution is to maintain the shortest distance possible between the arm pivot and the stylus by using the two holes nearest to the arm pivot.

The cartridge screws must be firmly tightened on the headshell to ensure perfect mechanical rigidity.

Mount the headshell on the end of the arm. Tighten the screws alternately and gradually. Should any of the screws resist, replace it with one of the three other screws so as not to damage the thread. The four screws must be firmly and thoroughly tightened so as to ensure perfect cohesion between the various mechanical parts of the tone arm.

Now plug the four gold-plated connectors in the cartridge according to the international code:

Red: right channel, hot

Green: right channel, ground

White: left channel, hot

Blue: left channel, ground

Note: The high-quality Goldmund connectors mounted on the GOLDMUND T3F tone arm are not adjustable in size. It is possible to obtain other ones for use with some cartridges with smaller pins, e.g. Old Koetsu, Supex.., as well as special ones for the Clearaudio Goldmund cartridge.

III. INSTALLATION OF THE T3F TONEARM ON THE TURNTABLE

Note : The following operations must be carried out with the stylus cover on the cartridge so as to protect your stylus.

The stylus must exactly cross the platter spindle center when you push the arm on the rail towards the enter of the record.

In a well designed arm, the stylus should run in a straight line and the only adjustment necessary is to ensure that this straight line crosses the middle of the record. The rail does

not necessarily have to be positioned parallel to the edge of the turntable. All positions are technically identical. However, for esthetic reasons, you should place the arm parallel to the edge of the turntable.

To mount your T3F on the Reference turntable, see the instructions of the turntable

Use the middle size allen key provided in the accessories box to unscrew the four screws holding the upper cover of the arm. Lift the cover off and remove carefully the foam wedges protecting the carriage during shipment.

Move the arm carriage until stylus of the cartridge is crossing the spindle center of the turntable platter. For this maneuver, slide the carriage along the rail firmly so as to overcome any resistance of the belt on the axis by lifting the arm manually if necessary. Slide the whole tone arm structure assembly backward and forwards until the stylus crosses the platter spindle center.

Tighten the six screws that hold the tone arm support to the turntable. Your arm is now correctly positioned.

IV. CONNECTING AND STARTING THE ELECTRONIC CONTROL BOX

The control box is connected to the tonearm by a gray cable fitted with a 12 point female BINDER plug at each end. This cable is reversible.

Attach one of the connectors of the gray cable to the plug on the back of the control box case.

Check that the POWER of the turntable is OFF.

Connect the main cable from the back of the control box to the wall plug.

Connect the left and right audio channels to the preamplifier. Use CAMAC standard LEMO or FISCHER plugs or the RCA on the side of the tone arm.

Connect the black ground binding post of the Control Box to the ground plug of your preamplifier by an ordinary cable of sufficient gauge.

You must now become familiar with the various controls on the turntable keyboard before tying out your GOLDMUND T3F tone arm.

V. CONTROLS AND OPERATION OF THE GOLDMUND T3F TONEARM

CAUTION : Try out any of the following operations before adjusting the tracking force and vertical tracking force and vertical tracking angle of the tone arm only with extreme care. (See VI and VII.)

CONTROLS OF THE ARM BY THE TURNTABLE KEYBOARD

1. Power Switch

On-off switch coupled with the turntable. It switches the system on. The red light on the turntable control box, the keyboard lighting and the two red lights on the tone arm itself should be on.

Press the Stop key to bring the arm back to the rest position.

2. Display Switch (located on front panel of the Control box)

This switches the numeric display on and off.

3. Controls

REPEAT (on the Control Box front panel) :

This switch is only active when the arm is in the rest position. It allows you to switch the "Repeat" function on and off. When it is on, the arm will automatically return to the beginning of the record and replay it after finishing its first play.

When "Repeat" is on, the "Repeat" light on the left of the panel comes on.

To stop playing the record continuously, press only "Stop".

STOP :

This switch stops the current operation, whatever the position of the arm, and brings it back to its normal rest position.

12" :

This operation is only valid when the tonearm is in rest position. It causes the arm to move to the first groove of a 12 inch (30cm) record and the cartridge to come slowly down on the record.

7" :

The same operation as above but for a 7 inch (17cm) record.

-> :

This switch moves the arm towards the rest position with gradually increasing speed. It stops when the switch is released.

If the arm is playing, it lifts quickly before moving horizontally.

<- :

Same as above, but in the opposite direction.

CUE :

Lifts or lowers the arm according to its current position. The speed at which the arm descends can be adjusted by the potentiometer labeled "SPEED ADJ" situated to the left of the front panel of the control box.

4. Control Panel (on the turntable control box)

The state of the tone arm is shown in two different ways.

By two alphanumeric indicators: If these indicators flash 00, it means that the connection between the control box and the tone arm is faulty. These indicators signal 12 when you are playing a 12 inch record and 07 when you are playing a 7 inch record.

By a set of LED indicators : While the arm is moving, a green arrow pointing in the appropriate direction appears on this control panel. The red light indicates that the arm is not moving.

USE OF THE T3F

To play the record, press 12" or 7" as appropriate.

To interrupt play, press "STOP"

To stop play and move the arm towards another part of the record, press either "->" or "<-" according to the direction in which you wish to move it.

To move the arm over a long distance, keep the button pressed since the arm is speeding up. For very slight move, press it on and off several times.

When you reach the position at which you want it to be, press "CUE" to lower the cartridge on the record.

VI. ADJUSTMENT OF THE VERTICAL TRACKING FORCE

1. Select the medium counterweight and mount it (without tightening the screw) on the back of the arm tube with the flat surface towards the top and the screw towards the side of the arm on which the measuring scale is engraved.

2. You may now remove the arm clamping bracket while holding the headshell with one hand. Switch the turntable on and move your arm forward over the platter by pressing "->". Now press "CUE" to lower the arm.

CAUTION : So as not to damage your stylus, the turntable platter should be completely still.

If the cartridge tends to rise, move the counterweight forward (towards the pivot of the arm). If the cartridge tend to drop to hard, move the counterweight backwards until you achieve balance. Use a good gauge to adjust the tracking force (see below).

Note : Your may find that, to achieve the correct tracking force, the counterweight selected has to be placed too far backwards on the tube. This means that the weight of your cartridge is not compatible with the counterweight you have chosen.

If the counterweight is too near the pivot, the tone arm may lack lateral freedom towards the spindle. Chose a lighter counterweight.

If, on the contrary, the counterweight is too far away from the pivot, you will obtain a better sonic result by selecting a heavier counterweight.

For very heavy cartridge you may get special counterweights from your Goldmund dealer.

3. Adjust the vertical tracking force with a very accurate gauge by moving the counterweight backwards and forwards. As soon as you reach the force required, tighten the lateral screw of the counterweight without blocking it.

4. Replace the stylus protection on the arm so as to proceed with the following adjustment without damaging your cartridge.

VII. ARM LEVELING AND V.T.A. ADJUSTMENT

Loosen the 4 horizontal screws blocking the rail on either side of the arm.

Place record on the turntable platter. (An old one that you do not mine damaging.)

You may now adjust the height of the rail by turning the 4 vertical screws under the rail (see figure 1). Adjust the height by listening, starting with the tube of the arm, parallel to the record surface.

Each cartridge has an optimum vertical tracking angle that is easily perceptible when you listen to it. You can easily find it by making small up or down movements. Also look at the indications supplied by the manufacturer of your cartridge.

IMPORTANT : With some cartridge, the arm may have a tendency to "dive" forward. If so, adjust the back and front screws by tipping the rail slightly forward so that the flap at the end of the tone arm remains in the photo-sensor of the pilot arm when the cartridge is down on the record and rises sufficiently when the arm is lifted up horizontal. The arm should be half way across the record.

Adjust the 4 screws under the corner of the rail accurately so that it is perfectly horizontal between its back and front supports.

When the above operation is completed, tighten the 4 horizontal screws attaching the rail to the lateral sides.

VIII. DAMPING

After adjusting the vertical tracking angle, the quality of the sound can still be improved by using the damping liquid provided with the T3F.

The quantity of damping liquid required will depend on the type of cartridge used. The damping liquid must be squirted with the syringe (both of which are to be found in the accessory box supplied) into the well, located under the tone arm tube. This syringe allows to measure out the exact quantity of liquid used.

The ideal amount of damping fluid can only be determined by listening. The better the cartridge, the smaller the quantity of fluid required.

If too little damping fluid is used, the sound will be hard and thin.

If too much fluid is used, the sound will be muddy and veiled.

The ideal quantity can only be achieved by experimenting ..

You are now ready to go ahead and get to know to enjoy your tone arm.

HAPPY LISTENING !